

**SAMPLE PLAN ALTERATION FORM**

**Project Name and Number:** 4<sup>th</sup> Avenue and Gambell Parking Lot; TDD: 11-04-0001

**Material to be sampled:**

Subsurface soil and ground water from the corner of 3<sup>rd</sup> Avenue and Gambell, the Crawford Park Condominiums (140 Eagle Street), and the bluff located on the former Native Hospital property northeast of the site. Subsurface soil samples were to be collected every 5-feet to ground water.

**Measurement Parameters:**

Analysis of subsurface soil for volatile organic compounds (VOCs).

**Standard Procedure for Field Collection and Laboratory Analysis (cite references):**

Subsurface soil samples were to be collected every 5-feet to ground water from each borehole. Samples were to be collected from each borehole utilizing a Geoprobe direct push drill rig. Samples were to be taken directly from the soil core immediately after cutting open the soil core and screening for VOCs with a TVA-1000. Ten subsurface soil samples were planned for each boring. One ground water sample was to be collected from each boring once encountered.

All subsurface soil and ground water samples were to be analyzed for VOCs.

**Reason for Change in Field Procedure or Analytical Variation:**

Several boreholes could not be drilled at their intended locations due to field obstructions or adverse terrain. Borehole BH02 was intended to be placed at the southeast corner of 3<sup>rd</sup> Avenue and Gambell Street. This location has a retaining wall and fencing on its west and north sides and closely spaced homes on its south and east sides. These features prevented access by the Geoprobe. As a result of these field conditions, the borehole was moved to southern end of the parcel.

Boreholes BH11 and BH12 were moved from their proposed locations due to the steep terrain on the bluff located on the former Native Hospital property (located northeast of the site). Borehole BH11 was moved to the top of the bluff, near the edge, in a flat area accessible by the Geoprobe. Ground water in BH11 was encountered at approximately 48-feet bgs (similar to other borings). The bottom of the well screen was set at 50-feet bgs. When purging BH11, approximately 2-gallons of water were purged from the boring; however, the borehole would not recharge. The other boring to be collected on the bluff (BH12) was moved to the bottom of the bluff in a flat area accessible by the Geoprobe (southwest of the intersection of East 1<sup>st</sup> Avenue and Ingra Street). While drilling at BH12, a strong petroleum-like odor was noticed. Because of this, additional ground water aliquots were collected for the analysis of gasoline range organics (GRO) and diesel range organics (DRO) at the direction of the EPA Task Monitor.

One borehole was planned for the Crawford Park Condominiums property (140 Eagle Street). Underground utilities were determined to be present north and south the condominiums building; and a steep embankment was present to the west of this building. The only location where drilling could occur was the condominium parking lot. The president of the condominium association would not allow drilling in this parking lot due to its small size and a concern for potential damage to the parking lot during drilling. No samples were collected from this location.



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### Variation from Field or Analytical Procedure:

BH02, BH11, and BH12 were moved from their planned locations to areas accessible by the Geoprobe. A ground water sample could not be collected from BH11 since water in the borehole did not recharge during purging. Additional ground water aliquots were collected from BH12 for GRO and DRO analyses. Further, a borehole was not drilled on the Crawford Park Condominiums property.

### Special Equipment, Materials, or Personnel Required:

The analysis of the GRO and DRO ground water aliquots required an additional laboratory subcontract. The cost of this subcontract was not included in the original budget.

CONTACT	APPROVED SIGNATURE	DATE
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